

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT <i>ENGINEERING & COMPLIANCE</i> APPLICATION PROCESSING AND CALCULATIONS	PAGES 17	PAGE 1
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	PROCESSED BY: Cynthia Carter	CHECKED BY

<p align="center">PERMIT TO CONSTRUCT MODIFICATION</p>

COMPANY NAME, LOCATION ADDRESS:

ConocoPhillips, Facility ID 800363
1660 W. Anaheim Street
Wilmington, CA 90744

EQUIPMENT DESCRIPTION:

Additions or modifications to the equipment description are underlined and **bolded**. New and modified conditions are underlined and **bolded**. Deletions to the equipment description and conditions are noted in ~~strikeouts~~.

Section H of ConocoPhillips' Facility Permit, ID# 800363

Equipment	ID No.	Connected To	Source Type/ Monitoring Unit	Emissions And Requirements	Conditions
Process 16: PETROLEUM, MISCELLANEOUS					
System 1: AMMONIA (AQUEOUS) TRANSFER & STORAGE SYSTEM					
STORAGE TANK, PRESSURIZED (35 PSIG), 80-F-218, SERVING SCR OF H2 PLANT U118 & SCR OF U90, AQUEOUS AMMONIA, WITH TRUCK LOADING STATION, VAPOR RETURN SYSTEM & TRANSFER PUMPS, <u>VENTED TO VAPOR RECOVERY SYSTEM, WITH TWO PRESSURE RELIEF VALVES WITH RUPTURE DISK SET AT 30 PSIG,</u> 16240 GALS; DIAMETER: 10 FT 6 IN; LENGTH 25 FT AN: 468688 <u>511899</u> Permit to Construct Issued: 06/12/07 <u>DRUM, SURGE, 80-F-222, AQUEOUS AMMONIA, VENTED TO VAPOR RECOVERY SYSTEM, WITH ONE PRESSURE RELIEF VALVE WITH RUPTURE DISK SET AT 190 PSIG, DIAMETER: 1 FT .75 IN HEIGHT: 6 FT</u>	D701				E71.26, E144.1, K67.6

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Equipment	ID No.	Connected To	Source Type/ Monitoring Unit	Emissions And Requirements	Conditions
Process 17: AIR POLLUTION CONTROL (FLARES)					
System 7: VAPOR RECOVERY SYSTEM (SOUTH)					S13.6, <u>S13.13</u> S15.16, <u>S18.2</u> , S18.10
COMPRESSOR, GB-152, WITH 400-HP, MOTOR A/N: 365149 <u>511896</u>	D733				
<u>FUGITIVE EMISSIONS, MISCELLANEOUS</u> A/N: <u>511896</u> <u>Permit to Construct Issued: TBD</u>	<u>D1826</u>				

CONDITIONS:

The following permit conditions shall apply to the subject equipment in order to comply with all applicable District, State, and Federal standards. Additions and deletions to the conditions are noted in underlines and strikeouts, respectively.

SYSTEM CONDITIONS

S13.6 All devices under this system are subject to the applicable requirements of the following rules or regulations:

Contaminant	Rule	Rule/Subpart
VOC	District Rule	1123

[RULE 1123, 12-7-1990]

[Systems subject to this condition : Process 1, System 2; Process 2, System 1 , 2 , 3 , 4 , 5; Process 3, System 1 , 3; Process 4, System 1 , 2; Process 5, System 1; Process 6, System 1; Process 8, System 1; Process 9, System 3 , 4 , 5 , 6; Process 10, System 1 , 2 , 4 , 5; Process 17, System 6 , 7; Process 18, System 1 , 2]

S13.13 All devices under this system are subject to the applicable requirements of the following rules or regulations:

<u>Contaminant</u>	<u>Rule</u>	<u>Rule/Subpart</u>
<u>VOC</u>	<u>District Rule</u>	<u>1173</u>

RULE 1173, 5-13-1994; RULE 1173, 6-1-2007;]

[Systems subject to this condition: Process 17, System 7]

Note: New condition added to the system to show Rule 1173 applicability.

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S15.16 The vent gases from all affected devices of this process/system shall be vented as follows:

All emergency vent gases shall be directed to the blowdown flare system.

This process/system shall not be operated unless the above air pollution control equipment is in full use and has a valid permit to receive vent gases from this system.

[RULE 1303(a)(1)-BACT, 5-10-1996; RULE 1303(b)(2)-Offset, 5-10-1996]

[Systems subject to this condition : Process 9, System 3 , 4 , 5 , 6; Process 10, System 1 , 2 , 4 , 5; Process 17, System 6 , 7]

S18.2 All affected devices listed under this process/system shall be used only to receive, recover and/or dispose of vent gases routed from the system(s) or process(es) listed below, in addition to specific devices identified in the "connected to" column:

FCCU (Process: 1, System: 1 & 2)

Hydrotreating (Process: 2, System: 1, 2, 3, 4 & 5)

Catalytic Reforming (Process: 3, System: 1 & 3)

Hydrogen Production (Process: 4, System: 1 & 2)

Hydrocracking (Process: 5, System: 1)

Alkylation (Process: 6, System: 1)

Blending (Process: 8, System: 1 & 2)

Butane Loading/Unloading (Process: 11, System: 1)

Butane Storage Tanks (Process: 13, System: 6)

Isomerization (Process: 18, System: 1 & 2)

Ammonia (Aqueous) Transfer & Storage System [only Device D701] (Process 16, System 9)

[RULE 1303(a)(1)-BACT, 5-10-1996; RULE 1303(b)(2)-Offset, 5-10-1996]

[Systems subject to this condition : Process 17, System 1 , 2 , 5 , 6 , 7]

S18.10 All affected devices listed under this process/system shall be used only to receive, recover and/or dispose of vent gases routed from the system(s) or process(es) listed below, in addition to specific devices identified in the "connected to" column:

Butane Loading/Unloading (Process: 11, System: 1)

Pressurized Storage Tanks (Process: 13, System: 4 & 6)

[RULE 1303(a)(1)-BACT, 5-10-1996; RULE 1303(b)(2)-Offset, 5-10-1996]

[Systems subject to this condition : Process 17, System 6 , 7]

DEVICE CONDITIONS

~~E71.26 The operator shall not use this equipment to service of any of the dry ESP (Devices C36 and/or C37) of FCCU Unit 152 after the commissioning period has ended for any of the WESPs (devices C1742 and/or C1743).~~

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~~[RULE 1105.1, 11-7-2003]~~ [Devices subject to this condition : D701]

Note: This condition is no longer applicable. The Wet Gas Scrubber took place of the dry ESP. Thus the ammonia tank is no longer needed for the FCCU. The inactivation form will be submitted and the ESPs will no longer show up in the permit.

E144.1 The operator shall vent this equipment, during filling, only to the vessel from which it is being filled.

[RULE 1303(a)(1)-BACT, 5-10-1996]

[Devices subject to this condition : D701, D825]

K67.6 The operator shall keep records, in a manner approved by the District, for the following parameter(s) or item(s):

Daily inspections and maintenance of all the valves at this equipment

[RULE 1303(a)(1)-BACT, 5-10-1996]

[Devices subject to this condition : D701, D1778]

BACKGROUND:

ConocoPhillips (COP) Los Angeles Refinery operates a refinery as two separate locations in the city of Carson and Wilmington. At the Carson Plant crude oil is processed in the crude unit where it is heated and distilled into various hydrocarbon components which are further processed downstream at the Wilmington Plant. The Wilmington Plant is a major producer of fuel products, including gasoline for Southern California. This evaluation is for the Wilmington Plant where it is part of the NO_x and SO_x RECLAIM Program. In addition, Wilmington's initial Title V permit was issued on July 1, 2009.

This evaluation covers an application to connect COP's ammonia storage tank F-218 (device ID D701) pressure relief devices (PRD) to the refinery vapor recovery system. COP would like limit the potential exposure of personnel to unsafe concentrations of ammonia in case of an emergency release from the PRDs. There is an overall increase in emissions of about << 0.5 lb/day of VOC for the project. The submitted applications are listed in Table 1.

Table 1- Submitted Applications

A/N	Date Received	Equipment	Device ID	Requested Action	Previous A/N
511896 MASTER APPLICATION	6/18/2010	Vapor Recovery System	P17S7	• Connect to ammonia storage tank	365149
511899	6/18/2010	Ammonia Storage Tank	D701	• Connect to vapor recovery system	468688

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A/N	Date Received	Equipment	Device ID	Requested Action	Previous A/N
511901	6/18/2010	Title V Facility Permit Amendment	NA	• Revise Title V Permit	NA

PERMIT HISTORY

- On April 12, 1991, PO D37499 (A/N 212869) was issued to Unocal for an anhydrous ammonia bulk unloading, storage, and vaporization system consisting of two liquefied anhydrous ammonia pressure tanks (Nos. F218 and F219) and a vaporization system.
- On May 2, 1994, Tosco submitted an application (A/N 292276) to convert the pressure Tank F-218 from anhydrous to aqueous ammonia to provide aqueous ammonia for the new SCR at Hydrogen Production Unit 118 under the RGP. Permit Construct was incorporated into the Facility Permit and issued to Unocal on December 15, 1994.
- On February 22, 1996, Unocal submitted an application (A/N 312097) to increase the throughput of pressure Tank F-218 from 28 to 146 turnovers per year so that it can also provide aqueous ammonia to the ESP of the FCC Unit. Permit to Construct was incorporated into the Facility Permit (Version 14) and issued to Unocal on March 13, 1996.
- On March 14, 1997, application (A/N 326151) was submitted for a change of ownership from Unocal to Tosco. Facility Permit Section H, Version 0, was issued to Tosco on May 29, 1997.
- On October 5, 2005 a permit was issued under application A/N 441261 to modify the ammonia storage tank to serve Heater B-401
- On March 22, 2007, A/N 468688 was submitted to update the equipment description to remove the FCCU's dry ESPs due to the construction of the new Wet Gas Scrubber and Wet EPSs (Rule 1105.1 compliance)

COMPLIANCE RECORD REVIEW:

As of December 8, 2010 a check of the AQMD Compliance Database for the past two years showed that this facility was issued 9 Notice of Violations (NOVs) and 1 Notice to Comply (NTC). However, all the NOVs and NTC are back into compliance. For detailed violation descriptions, refer to Appendix A.

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FEE EVALUATION:

The fees paid for the applications submitted are as follows:

Table 2-Application Fees Submitted

A/N	Equipment	BCAT/ CCAT	Type	Status	Fee Schedule FY 09-10	Fee Required, \$	Fees Paid, \$
511896	Refinery Vapor Recovery System	59	50	20	E	\$5,148.93	\$5,148.93
511899	Ammonia Storage Tank	000520	50	20	C	\$3,244.91	\$2,051.52
511901	Title V Facility Permit Amendment	555009	80	20	--	\$1,687.63	\$1,687.63
					Total:	\$10,081.47	\$8,888.08
					Net Fee Due:		\$1,193.39

PROCESS DESCRIPTION^a:

Aqueous Ammonia Transfer and Storage System:

From tank truck, aqueous ammonia is transferred to Tank F-218. There is an associated vapor return line from the tank to the truck. From Tank F-218, aqueous ammonia is pumped to a vaporizer before being injected.

Tank F-218:

Tank F-218 stores aqueous ammonia with a nitrogen blanket to serve the SCR of the Hydrogen Plant and Hydrotreating heater (Unit 90). The tank used to provide aqueous ammonia to the ESP of the FCCU, but it has been disconnected since the ESPs are no longer in use.

Connection to the Vapor Recovery System:

In the event of an emergency release, the ammonia would not go directly into fuel gas. Recovered vent gas is amine treated before being sent to the fuel gas system. Since the amine is an aqueous solution that's 80-85% water and ammonia is very soluble in water, the ammonia would go into aqueous solution. It would be carried down to the Amine Stripping Unit (P9:S4) where it would be stripped out of solution in the amine reactivators (D398& D399), along with the H₂S that's stripped from the amine. The ammonia gas would go with the H₂S to the reaction furnace in the sulfur plant(s) (D417 & D438), where it would be combusted to nitrogen and water.

The new valves and flanges that are being added are downstream of the two PRD's on the ammonia tank and the one PRD on F-222. All three PRD's have rupture disks underneath them (identified with the "PSE" designation on the P&ID's submitted with the application), which positively isolate downstream components from the ammonia. Therefore, in normal operation the new components will only be exposed to VOC's in the vapor recovery system because the flare gas will back fill the new pipes and flanges. The surge drum will now be listed in the facility permit under device ID D701 to show it has a pressure relief valve.

^a Process description gathered from A/N 326151 and ConocoPhillips

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EMISSIONS:

Because of this project, ConocoPhillips will need to install valves and flanges to connect the ammonia tank's PRDs to the vapor recovery system. As mentioned in the Background section of this evaluation, there will be an increase of VOC emissions of <<0.5 lb/day (30-day average) for the vapor recovery system.

The fugitive emissions calculations are based on emission factors derived from the *correlation equation method*^b. The fugitive components count before and after modifications as submitted by ConocoPhillips are located in [Attachment I](#).

The following table shows a summary of the affected permit unit's pre and post modifications emissions with an increase of VOC of <<0.5 lb/day 30-day average.

Table 3: Pre and Post-Modification Fugitive VOC Emissions

A/N	Equipment	VOC Emissions					
		Pre-Modification		Post-Modification		Change from Pre-Modification and Post-Modification	
		<i>lb/yr</i>	<i>lb/day</i>	<i>lb/yr</i>	<i>lb/day</i>	<i>lb/yr</i>	<i>lb/day</i>
511896	Vapor Recovery System	11,137.33	30.94	11,265.26	31.29	+127.89	+0.36

Compliance with Existing Permit Conditions

Condition S13.6	This project will not affect the ability to comply with this condition.
Condition S15.16	This project will not affect the ability to comply with this condition.
Condition S18.2	This project will not affect the ability to comply with this condition.
Condition S18.10	This project will not affect the ability to comply with this condition.
Condition E71.26	This condition is no longer applicable and will be removed.
Condition E144.1	This project will not affect the ability to comply with this condition.
Condition K67.6	The operator provided records and it expected to continue to comply.

^b SCAQMD's Guidelines for Fugitive Emissions Calculations June 2003

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RULES EVALUATION:

PART 1 STATE REGULATIONS

California Environmental Quality Act (CEQA)	
	<p>CEQA requires that the environmental impacts of proposed projects be evaluated and that feasible methods to reduce, avoid or eliminate identified significant adverse impacts of these projects be considered. The CEQA Applicability Form (400-CEQA) indicates that the proposed project does not have any impacts which trigger the preparation of a CEQA document. A significant project^c is one associated with the emissions levels listed below, during the operation phase of the project:</p> <p style="text-align: center;"> CO 550 lbs/day VOC 55 lbs/day NOx 55 lbs/day SOx 150 lbs/day PM10 150 lbs/day </p> <p>The expected impacts of the project on the environment are not significant; this application is to connect the pressurized ammonia storage tank to the refinery's vapor recovery system; therefore a CEQA analysis is not required.</p>

PART 2 SCAQMD REGULATIONS

Rule 212	Standards for Approving Permits	November 14, 1997
	<p>This modification meets all criteria in Rule 212 for permit approval. The connection of the pressurized ammonia storage tank to the refinery's vapor recovery system does not affect the operation without emitting air contaminants in violation of Division 26 of the State Health and Safety Code or in violation of AQMD's rules and regulations.</p> <p>This modification does not constitute a significant project because (1) the modified permit unit is not located within 1000 feet of a school; (2) the emissions increase does not exceed the daily maximum specified in subdivision (g) of this rule (30 lbs/day); and (3) the modified permit unit does not have an increased cancer risk greater than, or equal to, one in a million (1×10^{-6}) during a lifetime of 70 years or pose a risk of nuisance.</p>	
Rule 401	Visible Emissions	November 9, 2001
(b)(1)	<p>No visible emissions have been reported and are not expected under normal operating conditions. Continued compliance is expected with proper operation and maintenance.</p>	

^c Source: SCAQMD CEQA Handbook (SCAQMD, 1993)

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Rule 402	Nuisance	May 7, 1976
	No nuisance complaints have been reported and are not expected provided that the operation is conducted according to design. Continued compliance with Rule 402 is expected.	

Rule 404	Particulate Matter-Concentration	February 7, 1986
	This rule requires particulate matter discharged into the atmosphere be less than the standard listed in Table 404(a) of this rule. The pressurized tank is not expected to have PM emissions. Therefore, compliance is expected.	

Rule 467	Pressure Relief Devices	March 5, 1982
	The operator of a refinery or chemical plant shall not use any pressure relief device on any equipment handling volatile organic compounds unless the pressure relief device is vented to a vapor recovery or disposal system or inspected and maintained in accordance with the requirements of this rule.	
	This rule is not applicable because the PRS is in ammonia service.	

Rule 1118	Control of Emissions from Refinery Flares	November 4, 2005
	The purpose of Rule 1118 is to monitor and record data on refinery and related flaring operations, and to control and minimize flaring and flare related emissions. The provisions of this rule are not intended to preempt any petroleum refinery, sulfur recovery plant and hydrogen production plant operations and practices with regard to safety. This rule applies to all flares used at petroleum refineries, sulfur recovery plants and hydrogen production plants	
	This project will not affect the ability to comply with this rule.	

Rule 1173	Fugitive Emissions of Volatile Organic Compounds	February 6, 2009
	This rule applies to fugitive VOC components at refineries, chemical plants, oil, and gas production fields, natural gas process plants and pipeline transfer stations. This rule specifies leak control, identification, operator inspection, maintenance, and recordkeeping requirements for valves pumps, compressors, pressure relief valves, and other components from which fugitive VOC emissions may emanate.	
	The modification to the ammonia tank will incorporate new fugitive components that will be subject to Rule 1173. The fugitive components will be subject to the leak, identification, operator inspection, maintenance and recordkeeping and reporting requirements. ConocoPhillips shall include the new components into their inspection and repair/maintenance (I &M) program.	
	ConocoPhillips is expected to continue to comply with Rule 1173.	

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REG XIII	New Source Review December 6, 2002 Application Deem Complete Date: August 10, 2010
	<p>The new construction proposed in this project will cause an emission increase of a non attainment pollutant (ROG). The emission increases due to fugitives are shown in Table 3. The following is a discussion of each requirement in NSR.</p>
BACT: 1303(a)	<p>BACT is triggered when there is in an emission increase of any nonattainment air contaminant, any ozone depleting compound, or ammonia. For this project, there is an increase in ROG, but not ammonia.</p> <p>BACT has been included in the design of the proposed project. BACT means the most stringent emission limitation or control technique which:</p> <ol style="list-style-type: none"> (1) has been achieved in practice for such category or class of source; or (2) is contained in any State Implementation Plan (SIP) approved by the US EPA for such category or class of source. A specific limitation or control technique shall not apply if the owner or operator of the proposed source demonstrates to the satisfaction of the Executive Officer or designee that such limitations or control technique is not presently achievable; or (3) is any other emission limitation or control technique, found by the Executive Officer or designee to be technologically feasible for such class or category of sources or for a specific source, and cost effective as compared to measures as listed in the Air Quality Management Plan (AQMP) or rules adopted by the District Governing Board. <p>1303(a)(1) Best Available Control Technology (BACT) BACT is to be utilized for any project that results in an emissions increase. District policy requires BACT to be utilized for any emissions increase that is greater than 1 lb/day.</p> <p>Even though BACT does not apply, ConocoPhillips has elected to install sealed bellows valves, connect their relief valves to a closed vent system, and flanges meeting ANSI 16.5-1988 specifications.</p>
1303(b)	<p>Rule 1303(b) specifies that a Permit to Construct for any new or modified source which results in a <u>net emission increase</u> of any nonattainment air contaminant at a facility shall be denied unless the requirements specified in 1303(b)(1) through (b)(5) are met:</p>
1303(b)(1) Modeling	<p>There will be no increase in NO_x, CO, and PM₁₀; therefore, modeling is not required. Although there is an increase in VOC, modeling for VOC is not required.</p>
Offsets. 1303(b)(2)	<p>This project will result in increase of VOC emissions of <<0.5 lb/day. Therefore, offsets are not required.</p>
1303(b)(3)	<p>Sensitive Zone Requirements. ERC's are not required.</p>
1303(b)(4)	<p>As of December 8, 2010, ConocoPhillips, Wilmington has no outstanding</p>

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REG XIII	New Source Review	December 6, 2002
	Application Deem Complete Date: August 10, 2010	
Facility Compliance	NOVs/NCs. The facility currently has one variance under #4900-79 (filed 2/23/07) for Rule 1118 and there are no abatement orders. The facility is expected to comply with all applicable Rules and Regulations of the AQMD.	
Major Polluting Facilities 1303(b)(5)	A new major polluting facility or major modification at an existing major polluting facility shall comply with the requirements of this paragraph. This refinery is not a new major polluting facility, but the project is a major modification. Rule 1302(r) defines (in part) a major modification as any modification at an existing major polluting facility that will cause; (1) an increase of one pound per day or more, of the facility's potential to emit NOX or VOCs. There is an emission increase of less than 1lb/day of VOCs. Therefore, the requirements in this subparagraph do not apply. Compliance with this rule is expected.	

Rule 1401	New Source Review of Toxic Air Contaminants	March 7, 2008																													
	<p>This rule requires permit applicants to assess the cancer risks due to the cumulative emission impacts of new/modified sources in their facility.</p> <p>Requirements- Rule 1401 contains the following requirements:</p> <table><tr><td>MICR, without T-BACT:</td><td>≤ 1 in 1 million (1.0 x 10⁻⁶)</td></tr><tr><td>MICR, with T-BACT:</td><td>≤ 10 in 1 million (1.0 x 10⁻⁵)</td></tr><tr><td>Cancer Burden:</td><td>≤ 0.5</td></tr><tr><td>Maximum Chronic Hazard Index:</td><td>≤ 1.0</td></tr><tr><td>Maximum Acute Hazard Index:</td><td>≤ 1.0</td></tr></table> <p>Since the permit unit is being modified, a health risk assessment was calculated. The unit passed Tier 1, but since AQMD's R1401 spreadsheet calculates MICR, HIC, and HIA in Tier 2, the table below shows the results. The nearest residential (686 m) and commercial distances (410 m) were taken from the center of the project. See Attachment I for the Health Risk Assessment Report. The results of the health risk assessment are summarized below:</p> <table><tr><th colspan="5">Tank Health Risk Assessment Results</th></tr><tr><th></th><th></th><th>MICR</th><th>ΣHIC</th><th>ΣHIA</th></tr><tr><td rowspan="2">South Vapor Recovery System</td><td>Residential</td><td>1.419E-09</td><td><1</td><td><1</td></tr><tr><td>Commercial</td><td>6.283W-10</td><td><1</td><td><1</td></tr></table>		MICR, without T-BACT:	≤ 1 in 1 million (1.0 x 10 ⁻⁶)	MICR, with T-BACT:	≤ 10 in 1 million (1.0 x 10 ⁻⁵)	Cancer Burden:	≤ 0.5	Maximum Chronic Hazard Index:	≤ 1.0	Maximum Acute Hazard Index:	≤ 1.0	Tank Health Risk Assessment Results							MICR	ΣHIC	ΣHIA	South Vapor Recovery System	Residential	1.419E-09	<1	<1	Commercial	6.283W-10	<1	<1
MICR, without T-BACT:	≤ 1 in 1 million (1.0 x 10 ⁻⁶)																														
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Tank Health Risk Assessment Results																															
		MICR	ΣHIC	ΣHIA																											
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	RESULT	PASS	PASS	PASS
1401(d)(1)(A):	Based on Tier 2 results, the MICR values are less than one in a million.			
1401(d)(1)(B):	Not applicable.			
1401(d)(1)(C):	Since the MICR is not greater than one in a million, the cancer burden is not greater than 0.5.			
1401(d)(2):	Based on Tier 2 results, the Chronic Hazard Index is less than 1.0.			
1401(d)(3):	Based on Tier 2 results, the Acute Hazard Index is less than 1.0.			
1401(d)(4):	Since the residential MICR value is below than one in a million, the risk per year is less than 1/70 th of this value.			
1401(d)(5):	Not applicable since the permit conditions are not pursuant to Rule 1401.			
1401(d)(6):	Not applicable.			
Compliance is expected.				

Regulation XVII	PREVENTION OF SIGNIFICANT DETERIORATION (PSD)
	<p>As of July 25, 2007, the USEPA signed a new Limited PSD Delegation agreement with SCAQMD. SCAQMD now has the PSD responsibility for all new PSD sources and all modifications to existing PSD sources where the applicant is requesting to use SCAQMD's existing Regulation XVII to determine PSD applicability for a modification (and not the recent calculation methodology adopted by EPA as part of the NSR Reform).</p> <p>A PSD is not applicable for this proposed project since the District is not in attainment for Ozone of which VOC is a reactant and a pollutant from this modification. Therefore, Regulation 17 does not apply.</p>

Regulation XX	RECLAIM	May 6, 2005
	<p>ConocoPhillips is a RECLAIM facility. Therefore, it is subject to Reg XX. Since this equipment will not emit RECLAIM pollutants, there are no RECLAIM requirements applicable to the ammonia tank and vapor recovery system.</p>	

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Regulation XXX	Title V														
	ConocoPhillips, Wilmington has been designated as a Title V facility.														
	This project is considered to be a “De Minimis Significant Permit Revision”. Meaning that the cumulative emission increase is not greater than the following threshold:														
	<table><tr><td><u>Air Contaminant</u></td><td><u>Daily Maximum in Pounds Per Day</u></td></tr><tr><td>HAP</td><td>30</td></tr><tr><td>VOC</td><td>30</td></tr><tr><td>NO_x</td><td>40</td></tr><tr><td>PM-10</td><td>30</td></tr><tr><td>SO_x</td><td>60</td></tr><tr><td>CO</td><td>220</td></tr></table>	<u>Air Contaminant</u>	<u>Daily Maximum in Pounds Per Day</u>	HAP	30	VOC	30	NO _x	40	PM-10	30	SO _x	60	CO	220
<u>Air Contaminant</u>	<u>Daily Maximum in Pounds Per Day</u>														
HAP	30														
VOC	30														
NO _x	40														
PM-10	30														
SO _x	60														
CO	220														
	The emission increase is 0.36 lb/day of VOC; therefore the revision will be applicable to a 45-day EPA review [R3003(j)(1)(A)], but not public participation.														
	Facility <i>De Minimis</i> Emissions Accumulation (as of Initial Title V Issuance, 07/01/2009)														
	<table><tr><td><u>Air Contaminant</u></td><td><u>Existing</u></td><td><u>Additional due to this project</u></td><td><u>Total</u></td></tr><tr><td>VOC</td><td>0 lb/day</td><td>0.36 lb/day</td><td>0.36 lb/day</td></tr></table>	<u>Air Contaminant</u>	<u>Existing</u>	<u>Additional due to this project</u>	<u>Total</u>	VOC	0 lb/day	0.36 lb/day	0.36 lb/day						
<u>Air Contaminant</u>	<u>Existing</u>	<u>Additional due to this project</u>	<u>Total</u>												
VOC	0 lb/day	0.36 lb/day	0.36 lb/day												

PART 3 FEDERAL REGULATIONS

40CFR Part 60 Subpart GGGa	NEW SOURCE PERFORMANCE STANDARDS (NSPS) Standards of Performance for Equipment Leaks of VOC in Petroleum Refineries
§60.590a Applicability and designation of affected Facility	<p>This regulation is applicable to affected facilities in refineries that begin construction after November 7, 2006. The following are affected facilities under this subpart:</p> <ul style="list-style-type: none"> • Compressors • The group of all equipment within a process unit <p>Since the compressor is not being modified nor is the vapor recovery system considered a process unit, the requirements of this regulation do not apply.</p>
40CFR Part 63 Subpart CC	NATIONAL EMISSION STANDARDS FOR HAZARDOUS AIR POLLUTANTS FOR SOURCE CATEGORIES
§63.640 Applicability and designation of	<p>Applicability: ConocoPhillips Wilmington Refinery meets both criteria of subparagraph (a)(1) and (a)(2) of this regulation. Basically, this refinery emits 25 tons or more of hazardous air pollutants (HAP) and is considered a major</p>

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affected source.	<p>source as defined in section 112(a) of the Clean Air Act. Secondly, this refinery does emit some of HAP listed in table 1 of this regulation.</p> <p>Per 63.640(d)(5), the vapor recovery system is not subject to this subpart. Therefore, the requirements of this regulation do not apply.</p>
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CONCLUSION:

Based on the above evaluation ConocoPhillips is in compliance with all required rules and regulations and is expected to continue to comply. ConocoPhillips is also in accord with the permit equipment and conditions. (See [Attachment II](#) for their approval) Therefore, the following is recommended:

A/N	Recommendation
511896	Issue Permit to Construct with conditions listed in the Conditions Section
511899	Issue Permit to Construct with conditions listed in the Conditions Section
511901	Issue De Minimus Title V Facility Permit Revision

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APPENDICES:

- A. Compliance Status for NOV/NCs

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APPENDIX A: COMPLIANCE STATUS FOR NOVS/NCS

NOTICE NO.	NOTICE TYPE	VIOLATION DATE	FOLLOWUP STATUS	VIOLATION
D19705	NC	11/19/2009	INCOMP	MISSING DATA FOR EACH NOX AND SOX CEMS OPERATIONS DURING THE 2007-2008 COMPLIANCE YEAR. PROVIDE 1)START AND END TIME OF EACH INTERVAL BEYOND MIDNIGHT. 2)REPORTED EMISSIONS FOR EACH INTERVAL. 3) CORRECT EMISSIONS FOR EACH INTERVAL.
P26966	NOV	3/12/2009	INCOMP	THE AQMD WAS NOT NOTIFIED OF AN EXCEEDANCE OF THE 500,000 SCF DURING AN UNPLANNED FLARE EVENT WITHIN ONE HOUR.
P26967	NOV	4/2/2009	INCOMP	1) A GAP GREATER THAN 1/2 INCH WAS FOUND AT THE NORTH SIDE OF THE WEST API. 2) EMISSIONS GREATER THAN 500 PPM WERE FOUND AT THE API. 3) FAILURE TO COMPLY WITH ADMINISTRATIVE CONDITION #2 OF SECTION E.
P26969	NOV	3/27/2009	INCOMP	THE PRIMARY SEAL OF TANK 6, DEVICE ID#D549 WAS NOT REPAIRED IN 72 HOURS AND A WRITTEN REPORT OF THE VIOLATION WAS NOT SUBMITTED WITHIN 120 HOURS.
P26970	NOV	7/10/2009	INCOMP	FLARING OCCURRED BECAUSE OF A PREVENTABLE EQUIPMENT FAILURE AT SULFUR RECOVERY PLANT NO. 2
P26972	NOV	7/2/2009	INCOMP	INTERNAL COMBUSTION ENGINES EMERGENCY FIRE. D675, D076, D677AND D678 WERE OPERATED GREATER THAN 34 HRS. IN VIOLAITON OF PERMIT TO OPERATE CONDITION C1.75.
P26973	NOV	12/3/2009	INCOMP	COMBUSTION IN A FLARE OF VENT GAS WITH A HYDROGEN SULFIDE CONCENTRATION IN EXCESS OF 160 PPM AVERAGED OVER 3 HRS.
P26975	NOV	12/14/2009	INCOMP	FAILED TO MEET INCREMENTS OF PROGRESS OF VARIANCE CASE NO. 4900-79. SOURCE TEST NOT CONDUCTED OR PROVIDED TO DISTRICT AND FINAL COMPLIANCE WAS NOT MEET FOR UKC748 AND SOUTH C723 FLARES.
P26976	NOV	7/15/2010	INCOMP	1) DETECTED LEAKS GREATER THAN 50,000 PPM 2) OPENINGS WERE FOUND ON THE COVERINGS OF THE WASTE WATER SYSTEM 3)THE OPENINGS WERE NOT REPAIRED WITHIN THREE CALENDAR DAYS.
P26977	NOV	7/16/2010	INCOMP	1) LEAKS DETECTED GREATER THAN 50,000 PPM 2) LEAK DETECTED GREATER THAN500 PPM COMPONENT IN HEAVY LIQUID SERVICE. 3) LEAK THRESHOLDS GREATER THAN 5% FOR VALVES. 4) OPEN ENDED LINE NOT SEALED 5) BAKER TANKS NOT IN GOOD OPERATING CONDITION AT ALL TIMES.

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ATTACHMENTS:

- I. ConocoPhillips Estimated Fugitive Emissions and Health Risk Assessment
- II. ConocoPhillips Approval of Draft Permit